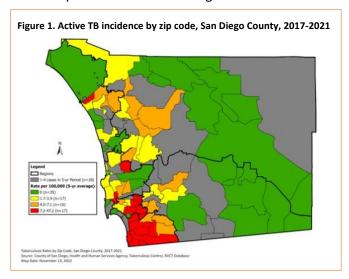


# **Tuberculosis Elimination in San Diego County**

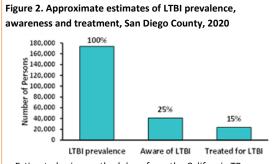
## The Human Toll of Active TB

- Active TB usually affects the lungs and spreads through the air when a person sick with TB coughs.
  - Active TB has a high associated mortality of approximately 10%.
  - 1 in 6 people diagnosed with active TB die within
     5 years of diagnosis.
- In 2022, San Diego County reported 208 new active TB diagnoses, a rate of 6.3 new cases per 100,000 persons.
   The highest rates and numbers of active TB diagnoses are in the South and Central Regions of the County (Figure 1).
- Children under age five are at the highest risk of severe complications, including brain and spinal involvement that can lead to lifelong disability.
- Isolation from family and friends, and exclusion from the workplace while contagious results in stigma, lost wages, and loss of employment, putting people with active TB at risk for poverty and homelessness.



### **Treatment of Latent TB Infection Prevents Active TB**

- Latent TB infection (LTBI) occurs when people who have been infected with the bacteria do not become sick with active TB right away, but instead harbor the germs in their body.
  - People living with LTBI can become sick with active TB at any time in the future if they are not treated with shortterm medications.
  - An estimated 85% of active TB cases occur after longstanding LTBI that was not treated.
- About 175,000 San Diegans are living with LTBI. Only 25% are aware of their infection and only 15% have been treated (Figure 2).
- Treating LTBI will prevent many people in San Diego County from getting sick with active TB.



Estimated using methodology from the California TB Control Branch Report on Tuberculosis in California, 2020 and associated Data Tables, applying national level data from the National Health and Nutrition Examination Survey, 2011-2012, to the San Diego County population.

#### The Case for TB Prevention

- Diagnosing and treating people with LTBI prevents active TB.
- Prevention is far less costly than TB treatment. The cost to prevent TB for one person is low (\$857) compared with the costs of diagnosing and treating one person with active TB disease (\$43,900).
- The U.S. Preventive Services Task Force recommends testing people at risk for TB and treating LTBI
   (Recommendation: Latent Tuberculosis Infection: Screening | United States Preventive Services Taskforce
   (uspreventiveservicestaskforce.org)).
- Provider and self-risk assessment tools are available to identify persons at risk for LTBI for testing and treatment (<u>Tuberculosis Control and Refugee Health Program (sandiegocounty.gov)</u>).
- Widely adopted **blood tests** to diagnose LTBI are more specific than the traditional TB skin test and result in fewer false positives, including from the BCG vaccine.
- LTBI short-course treatments regimens recommended by the CDC (such as rifampin daily for 4 months or
  rifapentine plus isoniazid weekly for 12 weeks) are better tolerated by patients, less expensive, and more
  likely to be completed by patients.



# **San Diego County TB Elimination Initiative**

On July 23, 2019, the San Diego County Board of Supervisors approved the development and launch of the San Diego County TB Elimination Initiative (TBEI). The TBEI is a public-private partnership that creates a coordinated TB elimination framework serving San Diego County's diverse population. The initiative convenes stakeholders from over 25 organizations to focus on effective TB prevention, including risk assessment, testing, and treatment of people with latent TB infection (LTBI) to prevent progression of latent infection to active TB disease. The TBEI planning work resulted in an actionable TBEI Implementation Plan that was received by the Board on July 13, 2021.

TBEI partner organizations collaborate on TB elimination activities across three committees:



# **Community of Practice**

- GOALS: Educate providers about LTBI care best practices and electronic health record
  enhancements that support LTBI quality improvement; encourage the development and
  use of a LTBI care cascade by healthcare organizations in the County; enhance capacity for
  LTBI care cascade measurement.
- **PARTNERS:** The TBEI Community of Practice convenes primary care, infectious disease, and pulmonary medicine providers, epidemiologists, quality leads from community clinics, health systems, health plans, universities, and State and local health departments.



#### **TB Prevention in Schools**

- **GOALS:** Enhance TB education and screening in San Diego County schools to prevent TB transmission on school campuses.
- PARTNERS: The TBEI Schools Committee engages partners from K-12 and higher education institutions in implementing TB prevention strategies that include TB peer education programs, as well as events that promote education and access to TB risk assessment, testing and LTBI linkage to care.



# **Community Outreach and Education**

- GOALS: Promote TB prevention through community outreach events and activities that
  educate about TB, promote awareness that TB is preventable through treatment of
  LTBI, and improve access to TB screening, testing, chest x-rays, LTBI clinical evaluation
  and treatment for high-risk populations.
- PARTNERS: The TBEI Community Outreach Committee convenes stakeholders from organizations that serve communities that are at high risk for TB.